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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,165	08/29/2001	Akiko Asami	7217/65203	6810

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COOPER & DUNHAM LLP
1185 Avenue of the Americas
New York, NY 10036

EXAMINER

PESIN, BORIS M

ART UNIT	PAPER NUMBER
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2174

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/942,165

Applicant(s)

ASAMI, AKIKO

Examiner

Boris Pesin

Art Unit

2174

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/26/2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,7-9,15-19,21-23,29 and 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,7-9,15-19,21-23,29 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

This communication is responsive to Amendment A, filed 7/26/2004.

Claims 1-5, 7-9, 15-19, 21-23, 29 and 30 are pending in this application. Claims 1 and 15 are independent claims. In the Amendment A, Claims 1, 4, 15 and 18 were amended. Furthermore, claims 29 and 30 were added as new. This action is made Final.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

Claims 1-5, 7-9, 15-19, 21-23, 29 and 30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

It is not clear to the Examiner what the Applicant means when he states, "said virtual spiral that represents a vicissitude of said unit of time". The word vicissitude is not found in the specification.

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 4, 15, 16, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Hatori et al. ("Hatori," US005977974A).

As per independent claim 1, Hatori teaches an information-processing apparatus comprising: storage means for storing raw data and time-axis data which is related to said raw data and stored in said storage means by being associated with said raw data (column 2, lines 41-44 and column 16, lines 1-8); thumbnail-icon-generating means for generating a thumbnail icon representing said raw data read out at said storage means (column 2, lines 41-44, *i.e. – icons represent data*); spiral-period-setting means for setting a spiral period of a virtual spiral based upon a unit of time selected from a plurality of units of time, each of said plurality being repeated in accordance with a predetermined pattern (column 9, lines 51-55); spiral-axis-setting means for setting a spiral axis of said virtual spiral that represents a vicissitude of said unit of time (column 2, lines 45-58, *user can change the time shown*); and thumbnail-icon-array-displaying means for displaying said thumbnail icon in an array on said virtual spiral on the basis of said time-axis data associated with said raw data represented by said thumbnail icon (column 2, lines 41-44).

Claim 15 is similar in scope to claim 1, and is therefore rejected under similar rationale.

As per claim 2, which is dependent on claim 1, Hatori teaches a representative-thumbnail-selecting means for selecting a specific one of a plurality of thumbnail icons

displayed as said array on said virtual spiral as a representative thumbnail icon (column 19, lines 40-44); and representative-thumbnail-icon-array-displaying means for displaying said representative thumbnail icon selected by said representative-thumbnail-selecting means in an array on said virtual spiral (column 19, lines 40-44).

Claim 16 is similar in scope to claim 2, and is therefore rejected under similar rationale.

As per claim 4, which is dependent on claim 1, Hatori teaches a thumbnail-icon-extracting means for extracting a specific thumbnail icon from a plurality of thumbnail icons displayed as said array based on said time-axis data based upon attribute data of said raw data; and data-outputting means for outputting raw data represented by said specific thumbnail icon extracted by said thumbnail-icon-extracting means (column 19, lines 40-44).

Claim 18 is similar in scope to claim 4, and is therefore rejected under similar rationale.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3, 8-9, 17, and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatori et al. ("Hatori," US005977974A) in further view of Miyao et al. ("Miyao," US006466237B1).

As per claim 3, which is dependent on claim 1, the teachings of Hatori in regards to claim 1 have been discussed above. Hatori does not disclose a spiral-layer-synthesizing means for synthesizing a plurality of spiral layers each comprising said virtual spiral, said spiral axis and said thumbnail icons; and synthesized-layer-displaying means for displaying a synthesized layer produced by said spiral-layer-synthesizing means.

Miyao teaches a spiral-layer-synthesizing means for synthesizing a plurality of spiral layers each comprising said virtual spiral, said spiral axis and said thumbnail icons; and synthesized-layer-displaying means for displaying a synthesized layer produced by said spiral-layer-synthesizing means (column 35, lines 5-11). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Hatori with a means to display a plurality of spiral layers, as taught by Miyao, with the motivation to more quickly find related information by grouping information in distinct information groups (column 34, lines 46-52).

As per claim 8, which is dependent on claim 3, Hatori teaches a visual-point-moving means for arbitrarily moving a visual point of said spiral layer displaying said virtual spiral, said spiral axis and said thumbnail icons (column 12, lines 13-17).

As per claim 9, which is dependent on claim 8, Hatori teaches that the visual-point-moving means automatically moves said visual point of said spiral layer along a time axis (column 10, lines 51-67).

Claims 17, 22-23 are similar in scope to claims 3, and 8-9 respectively, and are therefore rejected under similar rationale.

5. Claims 5 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over ("Hatori," US005977974A) in further view of de Judicibus (US006163317A).

As per claim 5, which is dependent on claim 1, the teachings of Hatori in regards to claim 1 have been discussed above. Hatori does not disclose that the spiral period's unit time set by said spiral-period-setting means is a one-year unit including a spring, a summer, an autumn and a winter, or a month unit.

de Judicibus teaches that the spiral period's unit time set by said spiral-period-setting means is a one-year unit including a spring, a summer, an autumn and a winter, or a month unit (column 4, lines 27-28). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Hatori with a means to set the unit of time of a spiral to include years or months, as taught by de Judicibus, with the motivation to allow for more efficient search and retrieval of a large amount of data (column 2, lines 23-27).

Claim 19 is similar in scope to claim 5, and is therefore rejected under similar rationale.

6. Claims 7 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatori et al. ("Hatori," US005977974A) in further view of Hinckley (US006333753B1).

As per claim 7, which is dependent on claim 2, the teachings of Hatori in regards to claim 2 have been discussed above. Hatori does not disclose that the representative-thumbnail-icon-array-displaying means displays said thumbnail icon as a semitransparent display.

Hinckley teaches that the representative-thumbnail-icon-array-displaying means displays said thumbnail icon as a semitransparent display (column 3, lines 52-56). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Hatori with a means to display icons in a semitransparent way, as taught by Hinckley, with the motivation to reduce the amount of user interaction required to view information as partially overlapped images can still be viewed without moving the occluding image as the occluding image is semitransparent (column 4, lines 11-15).

Claim 21 is similar in scope to claim 7, and is therefore rejected under similar rationale.

Allowable Subject Matter

Claims 29 and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 29 and 30 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not teach an information processing apparatus wherein said spiral axis setting means sets a direction in XYZ space and a slope of said spiral axis in combination with the spiral-period-setting means for setting a spiral period of a virtual spiral based upon a unit of time selected from a plurality of units of time, each of said plurality being repeated in accordance with a predetermined pattern and spiral-axis-setting means for setting a spiral axis of said virtual spiral that represents a vicissitude of said unit of time and thumbnail-icon-array-displaying means for displaying said thumbnail icon in an array on said virtual spiral on the basis of said time-axis data associated with said raw data represented by said thumbnail icon.

Response to Arguments

Applicant's arguments, see Page 15, filed 7/26/2004, with respect to objections to claims 1, 5, 10, and 14 have been fully considered and are persuasive. The Objection of claims 1, 5, 10, and 14 has been withdrawn.

Applicant's arguments in regards to the art rejection, filed 7/26/2004, have been fully considered but they are not persuasive.

The Applicant argues:

- a. Hatori does not teach a spiral period setting means for setting a spiral period of a virtual spiral based upon a unit of time selected from a plurality of units of time, each of the plurality being repeated in accordance with a predetermined pattern.
- b. Hatori does not disclose or suggest spiral axis setting means.

In regards to argument (a), the Examiner disagrees with the applicant that Hatori does not teach a spiral period setting means for setting a spiral period of a virtual spiral based upon a unit of time selected from a plurality of units of time, each of the plurality being repeated in accordance with a predetermined pattern. Hatori teaches, "Therefore, the unit time interval 613 is improper in such case, and the processing is completed by assuming that the data arrangement position attributes can not be obtained in step S704. Note, a message indicating that the unit time interval 613 is improper may be displayed to prompt a user to change the settings. When the user reads the message, he/she changes the unit time interval 613 from one hour to a half hour, for example, so that all the data can be displayed." Column 9, Line 51). It is clear that the user can select from a plurality of units of time.

In regards to argument (b), the Examiner disagrees with the Applicant that Hatori does not disclose or suggest spiral axis setting means. Hatori teaches, "Furthermore, it is still another object of the present invention to make it easy to change a range of time expressed by a time axis, and increase an operability for searching data by using

icons.” (Column 2, Line 55). It is clear that Hatori does indeed teach a spiral axis setting means that represents a vicissitude of the unit of time.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Boris Pesin whose telephone number is (571) 272-4070. The examiner can normally be reached on Monday-Friday except every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on (571) 272-4063. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Kristine Kincaid
KRISTINE KINCAID
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100